# MYRMECIA

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THE COVER

This illustration of an *Anopheles* male won third prize for Cherie Hart at the Society annual Insect Illustration competition.

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## NOTICE

Statements made in *Myrmecia* do not necessarily represent the views of the Australian Entomological Society. Items printed herein should not be reproduced without permission of the author of the material.

**COPY DEADLINE FOR NEXT ISSUE**

Material for publication in our May 2002 issue should be in the hands of the Editor before **Friday 12 July 2002**.

Copy is requested as .rtf e-mail attachments at: laurence@csiro.au

## EDITORIAL

First the Good News. Our President, Andy Austin, has been made a Full Professor at Adelaide. Moreover, Andy has joined the Advisory Committee of ABRS, thus with Mark Harvey of WA, giving excellent entomological input to that organisation. But the Bad News is really heavy. Not only is Australian 'Arthropodology' losing Heather Proctor – my Albertan mole tells me that she was their best student ever – but her husband, Dave Walter, will also leave this continent. They will be sorely missed, intellectually, socially and professionally. It seems remarkable that Australia is unable to find tenured employment for such outstanding scientists.

It is good to know from the Executive Meeting Minutes given below that the organisation of the AES Annual Meeting is going well. However, CSIRO seems to be going it alone, judging from the mail drop sent to all Members at that organisations expense. *Myrmecia*, our Society's main communication medium, has been given no news. Most of us decide to go to a scientific meeting based on the quality of the proposed programme, including the status of any Plenary Speakers. The increasing number of targeted, carefully structured, scientific meetings around Australia, whether in ecology, systematics or aspects of plant protection, means that attendance at AES Meetings becomes more a matter of loyalty than a carefully judged investment of time, money and energy.

The Executive Minutes also note that the Myrmecia Editorial was incorrect concerning the amount of money saved by reducing our print run, but fail to indicate that the saving was actually 143 dollars not my pre-printing estimate of $200.

LAM

## LETTERS to the EDITOR

**Who should bear the cost of AES?**

I am one of the 76 members who chose to have Myrmecia delivered electronically. I made the decision after reading that the future of Myrmecia may be threatened, in the belief that associated cost savings would help. However, after reading the Editorial of Vol 38 part 1 it seems that there is little in the way of cost savings to be gained from reducing the print run of Myrmecia. A 20% reduction

in the print run resulted in a saving of only $200, or about 10%. However, I am still happy with the decision I made, and applaud the Executive for offering full members the option of either a hard or an electronic copy. Options are very important in order to cater for the varied requirements of all members. Some are never going to feel comfortable with electronic media, whereas current students probably read little else. Offering other options may provide an opportunity for additional savings (administrative and financial) and also reduce the rate of loss of members who are too busy to get around to paying their subscriptions (62 members were in arrears for at least 1 year at the end of December 2001). Another publication I currently subscribe to provides 3 payment options. 1. Standard subscription (1 year; full price); 2. Sign an authority for the publishers to automatically debit subscription from a credit card each year until further notice (10% discount); 3. Three-year subscription (15% discount). Longer periods of subscription could also be offered. I took up the offer of a 10 year subscription with the Australian Society for Limnology. Options along these lines together with the popular early payment discount may cater for a wider range of needs of members. I agree with the editor of Myrmecia that members of AES should largely support, maintain and promote the society at our own expense. For members employed as scientists, this cost is relatively minor, especially considering that membership can be claimed as a tax deduction. However, membership of AES not only serves the private interests and needs of members. It also serves the professional needs of many members through both the Australian Journal of Entomology and Myrmecia. Both provide a medium through which the activities of other scientists working in fields related to entomology can be made known. Many employers support the professional development of their staff. If membership of, and participation in, the activities of AES was considered by employers as a form of professional development, then it follows that they may support such membership to some degree. Perhaps rather than making the assumption that we should personally completely support the society, it would be worthwhile for the society Executive to consult some major employers of entomologists, for their opinion.

Debbie RAE

**Where is AES going?**

Various letters and editorials have recently aired some linen on a range of issues that might generally be classified under the heading of 'The Future of AES' (Myrmecia 37/4 Ed; 38/1 Ed., Upton, Heather, Allsopp). When I read these I felt an opinion forming, but then I thought - Here is a member with a poor attendance record at Annual Conferences, a nil record in serving the Society, a nil record in Myrmecia contributions and a below average publication record in AJE. What right do I have to voice an opinion, but then I am a member of some 30 years, and that's worth something.

Perhaps not being as close to the debate as some may give me some claim to an outsider's viewpoint. Space demands brevity, but please don't misconstrue this as a spray.

The issues – the Society, Annual Conference, AES and Myrmecia. On the Society, and remember these are just my personal observations, the AES is a minor player on the world stage. The AJE is largely ignored by others. Unsupported by any stats., nonetheless I would be confident in claiming that its published papers have a low citation rate, compared with papers published in other prominent entomological journals. As to the objectives of the AES-the website lists some fairly unambitious goals. Where is AES going now? A look at the Society's activities may provide some insight. There are reasons why I haven't been a regular attendee at the Annual Conference. Lack of program planning and the cost are a couple of reasons. What would I suggest? There is an obvious model – the Australasian Applied Entomological Conference. Although held infrequently, the last two were very successful. Good programming, a high level of professionalism, strong scientific standards and sponsorship. The last AAEC in Brisbane had 10 Symposia, attracted 110 papers and 61 posters, with a Conference keynote speaker, keynote speakers for each symposium and a science program committee. Attendance was in the hundreds. There were 20 sponsors including chemical companies, R&D Corporations, CRCs and others. There was a Conference theme: Pest Management – Future Challenges. Compare this with AES Annual Conferences. Seemingly directionless programs not rewarded with the level of support organisers might hope for. The 2002 Conference in WA is asking for a full registration fee of $445 on top of travel and accommodation. At the recent 1st International Symposium on Biological Control of Arthropods held in Hawaii, the registration fee was $US120, but then it was sponsored. I presume from the absence of any mention on the recent flyer for the local event that this is not the case this year. Has it ever been? I don't think that

an Entomology Conference of the scale of AAEC can be sustained annually, but why not combine the efforts of AES and AAEC and produce something worthwhile on a biennial basis? Adopt a Conference theme; have invited keynote speakers including from overseas. In other words give the Conference some substance. Sponsorship is a must to moderate the cost to participants and should be sought to provide ongoing support to the Society. Another proactive step might be to encourage employers of entomologists in this country to ensure that their staff attend the Conference. I recently raised this within NSW Agriculture that our Departmental Executive might consider supporting relevant national professional societies by encouraging and providing support for staff attendance. The cost to organisations of this support might be another argument for a Biennial Conference. As for Myrmecia-I enjoy the current style. It has a vital role in communicating news and views amongst our members and I am grateful for the unpaid efforts of our current and immediate past editors. I don't want it to be reduced to mainly formal Executive Business. A saving of $143 in moving from hard copy to electronic version is unconvincing, especially if it results in more effort to achieve that outcome. However, it would have been nice over the years not to have been forgotten by the News Bulletin, and others might claim that as well. There is a need to overhaul the business of AES. I agree with LAM about the need to review AJE and with MU for the Executive to have a permanent base. Those currently involved with the preparation and publication of AJE and on the Executive of AES needn't see this as a criticism of their efforts, but rather a recognition that times change and we need to move with them.

Stephen GOODWIN

# EXECUTIVE MEETINGS

**Current membership:**

| | | Paid | Not Paid |
|---|---|---|---|
| Members (Paper) | 370 | 251 | 11006 |
| Members (PDFc) | 86 | 86 | |
| Retired | 87 | 72 | 526 |
| Student | 60 | 39 | 947 |
| Overseas | 46 | 29 | 1301 |
| **Total** | **649** | **477** | **13780** |
| | | 73% | |

**Meeting 399** - 31st January 2002

Approximately 20% of members are to receive an electronic copy of *Myrmecia*.

Of the 87 people who were either excluded as members or suspended for not paying their subscriptions at the time of the last meeting, 29 have now paid and have been reinstated.

Aventis, Syngenta and Bug for Bugs are fully paid up Sustaining Associates. Australian Entomological Supplies have decided not to remain as a Sustaining Associate.

Organisation for the WA conference is well under way. O. Edwards is not employing a conference organiser and requires no seed funds. The Conference Dinner will be included in the Registration Fee.

**New members**:

Dr Chris Watts, South Australian Museum, North Terrace Adelaide SA 5000 (Honorary Entomologist). Interested in aquatic beetles

Mrs Megan Connolly, PO Box 1179, Katherine NT 0851, Technical Officer

**Meeting 400** - 28th February 2002

The first electronic issue of *Myrmecia* was sent to members on 8-Feb-02

The editorial in the last issue of *Myrmecia* was incorrect with respect to amount of money saved due to introduction of the electronic version. [*Myrmecia* editor comments: the printers bills were 1980 dollars (October) and 1837 dollars (January); a reduction of 143 dollars]. For the January issue the print run was cut back to the actual membership (750). Spare copies will be retrieved from the distributors. Copies were not printed for the institutional subscriptions. The next print run will be further reduced to take into account the electronic subscriptions of the members.

**New members**:

Robert Weppler, VIDA, DNRE Horsham Victoria

Melinda Dodgson, DNRE, Plant Standards, Knoxfield, Victoria

Dr Wiwat Suasa-Ard, Thailand

**Meeting 401** - 28th March 2002

Contract with Blackwell science for AJE has been signed by the President and Vice President of the AES. The final signatory from Blackwell Science is away for three weeks, so contract will not be finalised until their return.

The Society is not affected by the new Privacy Act because it has an annual turnover of less than $3 million and it does not disclose personal information about individuals for benefit. This status was confirmed by a member of staff of the Office of the Federal Privacy Commissioner.

**New members**:

Mr Philip Barton, School of Ecol. and Envir., Deakin University, Geelong – PhD student investigating the biology of *Ochlerotatus camptorhynchus* (Culicidae).

Mr James Young, Student, Macquarie University: Post graduate diploma on the ultrastructure of the basitarsus of Diptera: Empididae being followed up by a MSc on the same topic.
Ms Katarina Mikac, Student, University of Canberra

## KENNETH HEDLEY LEWIS KEY

28 August 1911 - 11 January 2002

[Ken was always an extremely meticulous worker. He left copious notes and records covering every aspect of his studies. He left nothing to chance, he even wrote, and left, for use on just such an occasion as this, a detailed biography, of which this is an edited version.]

Ken Key was born in Cape Town on the 28th August 1911 but spent most of his early boyhood in Pretoria. By the age of seven he had assembled a collection of pinned specimens and was making notes on their habits. On returning to Cape Town in 1921 Ken's formal education began at the Rondebosch Boys' High School, from which he matriculated in 1927 at the age of 16. During these years his interest in insects continued and he also became interested in the rich flora of the Cape Peninsula.

In his matriculation examination Ken did best in mathematics and lowest in science. However, "science" at that time did not include biology, so when he enrolled at the University of Cape Town in 1928, it was for a B.Sc. course, with zoology and botany as majors - entomology not being available. After a preparatory year of Physics, Chemistry, Latin, and Economics, Ken plunged into the zoology and botany courses. In zoology he found himself under an *enfant terrible* in the newly appointed Professor Lancelot T. Hogben, then in his late twenties and not yet world famous. Conservative Cape Town society could not adjust to Hogben - not even University society - and he soon returned to England. One noteworthy event of this was when he took a "coloured" woman to a ball. Hogben believed in shock tactics, and these were not without their effect on our teenage student from a prim - indeed puritanical - home environment. In the botany department Ken came under a very different kind of man, a shy Englishman, R.S. Adamson. While Hogben had turned upside down all conventional ideas of a zoology course, Adamson, although himself an ecologist, ran a conventional botanical course. Ken adjusted to these different approaches and emerged with his B.Sc. and the class medals for both subjects in both years. His entomological interests had not helped him in zoology.

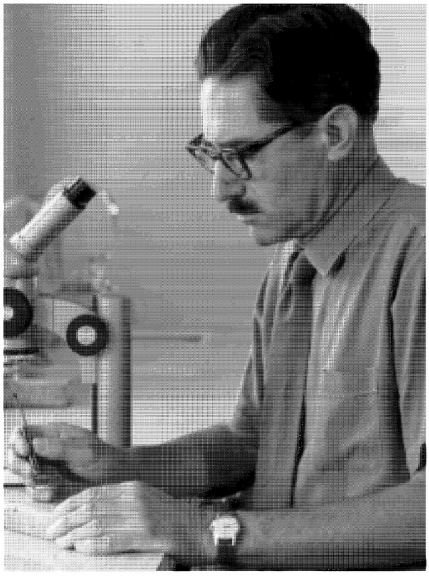
In 1931 the zoology department at Cape Town came under the marine biologist T.A. Stephenson. Stephenson redressed the inbalance of the Hogben era by instituting traditional courses in comparative anatomy - vertebrates and invertebrates in alternating years for the M.Sc. degrees. As luck would have it, Ken was again cheated out of any formal training in entomology by landing in the vertebrate year, but took his degree with first class honours at the end of the year. The only concession made to his interests was permission to choose as his research subject the topic "Acrididae of the Cape Peninsular". His thesis on this subject embodying observations on the distribution, behaviour, and life-cycle of some 30 or 40 local grasshopper species, won him the Purcell Memorial Prize awarded by the University, and probably assisted him towards the George Grey Memorial Scholarship which enabled him to proceed in the following year to the Imperial College of Science and Technology (London University) to do a Ph.D. in (at last) the Department of Entomology.

Ken's interest in grasshoppers had arisen quite fortuitously. B.P. Uvarov, the Russian authority on locusts and grasshoppers, was seeking someone in South Africa who would collect the local grasshoppers for him and Ken was put in touch with him. This contact was renewed when Ken moved to London in 1932, and led to his choice of *Locusta migratoria* as the subject of a study of that locust, which gained him his Ph.D. in 1936. It also led to taxonomic work on grasshoppers, in which Uvarov was his mentor, at the British Museum of Natural History. Ken's doctoral project yielded four published papers two of which were on the African genera of grasshoppers. However, they were not Ken's first; this had been published in 1930, in the South African Journal of Science while he was still an undergraduate.

While at the British Museum in 1935 Ken was visited by A.L. Tonoir, who had been appointed to the then CSIR Division of Economic Entomology by R.J. Tillyard, its first Chief. Tonnoir was looking for a young man to fill a vacancy for an Assistant Research Officer to carry out investigations on the "grasshopper" problem in Australia. Ken was encouraged to apply and in due course he was offered the job and arrived in Perth in May 1936.

Just before Tonnoir's intervention Ken had suffered a rejection without which his life would have taken a very different turn. A vacancy had occurred for an Orthopterist in the British Museum and Ken applied. He was interviewed by a forbidding panel of British public servants and establishment entomologists, including N.D. Riley, then Keeper of

The Chief Curator



The Dedicated Orthopterist

Entomology. Ken answered the questions with sturdy colonial bravado. He was not offered the job.

In Australia, still in his early twenties, Ken faced two sets of difficulties. The problem was a broad ecological one, yet he was ignorant of the climatology of the Australian soils and vegetation, and of the economics, politics and technology of Australian rural production, with which the locust problem was intimately enmeshed. In addition, he had had no experience of doing research under direction, and although he was only too conscious of his limitations in the unfamiliar environment, he also found that that direction was inadequately informed. In 1936 it was difficult for Ken to obtain information on matters of plant ecology or be referred to an adequate soil map of a critical area. He had to fill in the gaps himself as best he could. He dug soil profiles for correlation with locust life-cycle events and did his own reconnaissance surveys of the vegetation of locust outbreak areas and eventually felt that he was getting the hang of the problem.

That problem was essentially that of where and how locust plagues originated. B.P. Uvarov's theory of locust outbreaks was that for any given species there were special areas in which the ecological conditions permitted both multiplication of the locusts and their active concentration. Physiological changes then lead to "phase changes", with the concentrations comprising respectively swarms and non-swarming populations. After some preliminary taxonomic clarification of the Australian pest species, Ken proceeded to test the Uvarov concept on *Chortoicetes*. Over a period of several years he was able to establish that it indeed applied, and he mapped and characterised a number of outbreak areas ecologically. The results of this work were published in a series of four papers between 1938 and 1945.

In 1939 Ken was joined by L.R. Clark and this collaboration continued throughout the war years. It was felt that a knowledge of the location and characteristics of outbreak areas would enable conventional control measures to be applied at an early stage of an outbreak or allow changes to be made to the ecology of the areas that would prevent multiplication and swarm formation. Unfortunately, the urgency of the war situation led to efforts being directed into the second of these control options before sufficient knowledge had been gained of the insect's behaviour.

Ken's only real distraction from work on locusts and grasshoppers occurred during the war, when he was called upon to organise an investigation into a massive infestation of baled wool in Brisbane

by two species of clothes moth. The most interesting finding of this episode was the control of the infestation, in a store not treated by insecticide, by immense numbers of spiders that built their webs between the stacked wool bales. This was reported only in 1959 in a joint paper with I.F.B. Common who, with K.R. Norris, had participated in the work.

In 1946 Ken was awarded a D.Sc. degree by the University of London and, later, by the University of Cape Town in 1962.

After the war Ken turned to the writing up of his considerable data on the taxonomy of *Chortoicetes* and *Austroicetes*. This work, which is still the basic reference in its field, was published as a small book in 1954. However, Ken first undertook a close examination of Uvarov's "Phase Theory", which had to be clarified for his book and in 1950 he published a "Critique" of the theory which was subsequently widely misquoted by close adherents of the theory. About this time Ken was made strenuous efforts to organise a trial of a strategy of control that would follow the first of the control options mentioned above. Unfortunately there was no outbreak for a couple of years and the momentum was lost. Not for the first time Ken was to reflect how much easier it was to work with insects than with humans.

During the second half of the fifties, Ken began to lose interest in *Chortoicetes*. He devoted time to various side-line projects: principally two papers (with M.F. Day) on a unique temperature-controlled physiological colour-change response in the alpine grasshopper, *Kosciuscola tristis*, and one that recognised and studied for the first time Uvarovian phases (for which Ken coined the adjective "kentromorphic") in the stick insects. At this time also, Ken began an association with the cytogeneticist M.J.D.White seeking the solution of taxonomic and speciation problems in grasshoppers with the aid of features of the chromosomes. The potential of this was spectacularly illustrated when White's examination of the Karyotypes of the genus *Austroicetes*, monographed by Ken in 1954, showed that one of his "races" of *A. pusilla* was in fact a completely different species, although the siblings can still not always be separated on any feature of their gross morphology. This led to a joint paper published in 1957, the fore-runner of a number of joint or parallel studies that continued beyond the retirement of both workers.

In 1959 a combination of circumstances led to a final severing of the connection with *Chortoicetes* . The polarisation of theoretical ecology in Australia between two schools of thought made it very difficult for a non-joiner in the Division to remain unaligned. Furthermore, a major cytotaxonomic study of the endemic grasshopper subfamily Morabinae was being planned with M.J.D. White. However, the final determinants of the move into taxonomy came from a different direction.

Taxonomy in the Division of Entomology had grown in a haphazard fashion to meet the demands by workers on other projects. Collections of great importance had been assembled and these had become well known to overseas taxonomists who began to express concern at the lack of acknowledged institutional responsibility for them. This pressure was reinforced by recommendations of a Committee of Review appointed to survey the work of the Division prior to the retirement of Nicholson as Chief. These were to the effect that a Curator should be appointed with authority to organise a unified system of curation, including policies on curation, loans, and other matters. Nicholson accepted the recommendations and Ken was appointed Curator. Later, in January 1968, he was designated Chief Curator.

Ken took his new role seriously. By means of extended discussions with his independent-minded taxonomic colleagues he had to secure acceptance of restraints and standardised procedures that were not always welcomed by people who had long been a law unto themselves. Moreover, this was done in the face, initially, of only luke-warm support from many quarters. In due course all this changed, and by December 1970, when Ken finally relinquished the Chief Curatorship in order to concentrate on his research, the Taxonomy Group was a happy and united section of the Division that had not only gained the respect and understanding of the CSIRO administration but was recognised as one of the worlds major taxonomic institutions. In 1962 these insect collections gained further recognition when the Commonwealth Government officially gazetted the Australian National Insect Collection as "a national heritage, which it is the responsibility of the Commonwealth to preserve for future study".

From 1959 onwards, Ken published some 40 papers on the taxonomy of the Australian orthopteroid insects (two under joint authorship with M.J.D. White), and several others on theoretical and methodological issues. He contributed chapters to five books, including both editions of the "Insects of Australia". He also built up in Canberra a collection of Australian Orthoptera far superior to that in the

British Museum and indeed at least equal to all other collections of Australian Orthoptera put together.
Ken was elected a Fellow of the Australian Academy of Science in 1959 and served on the Sectional Committee for Biological Sciences; and in 1975 membership of the Council. He was not by nature a committee man, but served on committees in both CSIRO and the Academy. He was a member of the Academy's Fauna Committee, and he did a stint on the Advisory Committee for the Australian Journal of Zoology and the Editorial Board of "Pacific Insects". He was foundation President of the Ecological Society of Australia and a Foundation member of the Australian Entomological Society. In the fifties and sixties he was an active member of the International Commission on Zoological Nomenclature. He played a leading part in the discussions prior to the 1961 revision of the International Code of Nomenclature and od was a member of the Editorial Committee formed to produce a further revision. He was appointed to the Interim Council of the Australian Biological Resources Study set up in 1973, and served for the three years of its existence. Ken was also a member of both the Linnean Society of New South Wales and the Royal Entomological Society of London.
In August 1976, on his 65th birthday, Ken retired from CSIRO and became an Honorary Research Fellow, continuing his taxonomic studies on grasshoppers. He was still publishing taxonomic revisions and papers on theoretical taxonomy, taxonomic nomenclature, and grasshopper biology in December 1994 when the onset of ill health forced his second retirement from the Division. Ken was married three times and is survived by a son and four daughters.

Murray UPTON

## ABRS Psylloidea project

The major group of sucking bugs known as psyllids has evolved in Australia into a very large number of species, particularly in association with our two largest plant genera, *Eucalyptus* and *Acacia*. The ABRS Invertebrates Sub-Program, as part of its objective of making available to the community information and identification tools for targeted sections of the Australian fauna, funded David Hollis to spend several months in this country. David is one of the very few Psylloidea specialists worldwide, and although he has retired from the staff of the Natural History Museum, London, he remains an active researcher on the group. ABRS contracted him to produce a checklist and guide to

David and Jean Hollis at Orange

the Australian Psylloidea, work that will provide Australian agriculture, forestry, and quarantine services with a tool for pest recognition, and give a firm basis for future biodiversity studies, thus enabling some future Australian student to study this group.
In fact, ABRS got a bargain! David and his wife, Jean, have been working tirelessly in Australia for 3 months —visiting and sorting collections at ANIC, AQIS Mareeba, Queensland Museum, Queensland DPI, Queensland Forestry, University of Queensland, South Australian Museum, SARDI, NSW Agriculture's Orange Institute, NSW Forestry Beecroft, Australian Museum, Northern Territory DPI and NT Museum. This work has raised the number of psylloid genera known from Australia by 33%, from 40 to 60. Another important product has been the large number of Australian research workers that David and Jean have made contact with, in agriculture, forestry and quarantine departments, where ever they have travelled. Based at CSIRO in Canberra, they expect to return to Australia for another three months toward the end of this year, starting this second phase of the project in Perth.
The new checklist of names, together with all available host data, will be on-line by the middle of 2002 through the ABRS database at:

<www.environment.gov.au/abrs/abif-fauna>. This will be followed by publication of a guide to the Psylloidea of Australia later in 2003.
ABRS will be interested to hear from anyone who might consider a similar project on the Coccoid groups.

Alice WELLS
ABRS Invertebrates Sub-Program

## So Long, and Thanks for All the Mites or The Road from Equipment to Tenure

As of May, I will have lived in Australia for five years. As of July 1, I will be back where I spent the other 32 years of my life, Canada. The cause for this northward migration is neither homesickness nor a salmonoid desire to return to my natal stream for spawning. Rather, it is the simple economic fact that there is a job for me in Canada but no prospects in Oz. I am not bitter about this - ok, maybe a little piqued – because when I first came here it was on a 3-year contract, without the promise of tenure or even an extension. However, in 2000, when the first contract ended, I was granted another year. Then, in 2001, came another year's extension. In January 2002, I and another lecturer were given 6 month contracts with our salaries extracted from the equipment fund. Being downgraded from a human to a piece of equipment - and one with a short shelf-life, to boot - was a bit of a blow to the ego. It also was a strong signal that the probability of tenure at Griffith was < 0.0001. So in January I furtively departed these sweltering shores and flew to Edmonton, Alberta, for a job interview at my undergraduate *alma mater*, the University of Alberta. The shock of going from +37 to -30° C was a bit rough, but the atmosphere at the U of A was warm. My interview seminar was well-received as were two brief teaching demonstrations I gave of Australian software (LucID, PATN). The beginning of each presentation was greeted with low gasps from the audience, which I initially attributed to the brilliance of my PowerPoint graphics, but was actually shock at seeing the time on my projected lap-top screen. I highly recommend this as a tactic when giving talks overseas, as seeing "3:21 am" appears to gain more sympathy from an audience than an apologetic "Sorry, I'm a bit jet-lagged." Regardless of whether it was the quality of my interview, the jet-lag-sympathy vote, or a desire to reward anyone willing to trade the subtropics for the subzero, I got the job. A **tenured** position, I should point out, with thinly masked glee.

But let's get back to my not being bitter. Environmental Studies at Griffith did all it could to keep me there, including trips to vice-chancellors on my and other contract lecturers' behalves from Heads of School and a contingent of fiery Full Professors. They won us a few extensions but the money seems now to be truly exhausted. How did this situation come about? Over extension of 'in-kind' contributions to CRC's from higher university management. When a professor is 110% contributed to CRC research, there's not much of his or her time left for the homely tasks of convening courses. It seems that someone didn't contemplate this too deeply when signing the in-kind contracts. I was convenor of two courses and taught in a half-dozen others. Who will do this teaching at Griffith now? Sessional staff are likely to be hired to give lectures and workshops, but the convening will fall on the shoulders of the already over-contributed professors. Something is likely to break but I don't care to speculate whether teaching or CRC research will suffer most.

As well as giving me a teaching C.V. of astonishing breadth, life in Australia has worked other transformations. When I arrived I was taxonomically narrow-minded: "I work on water mites" was my mantra. But I soon found that water wasn't as easy to come across in Australia as it is back in Canada, and there was already a superb water mite taxonomist in WA (Mark Harvey) doing a better job on systematics than I ever could. But there is a lot of soil here, and also a rich diversity of bird life. Both have been relatively unexploited as far as their acarine inhabitants go, and over the years I found myself drifting away from water and more towards land and lorikeets. The extent of my interactions with other entomologists – or more properly, arthropodologists – has also widened, and I have served on the councils of both the Australian Entomological Society and the Entomological Society of Queensland. In making the move to Canada I leave behind many good friends and colleagues, and (until he moves out later) even my husband. But this is "auf wiedersehen", not "goodbye". Oz can't get rid of me so easily, especially when there are so many true-blue mites yet to be discovered in this sunburnt country.

Heather PROCTOR

## Native Australian Cockroach now a Household Pest

Residents in the Canberra, ACT area have recently become aware of a large brown cockroach, *Drymaplaneta communis* Tepper (Blattidae; Blattinae), the Common Shining Cockroach. For a colour photograph, see Rentz, Plate 356, in *Grasshopper Country: The Abundant Orthopteroid Insects of Australia*. University of NSW Press. Pp. 1-284; 1996. It is easily recognised by its apparently wingless appearance (the tegmina are minute and fused to the top of the thorax) and the yellow semi-circular band on the thorax and first few abdominal segments. Mackerras (1967; Australian Blattidae (Blattodea) IX. Revision of Polyzosteriinae Tribe Methanini, Tryonicinae, and Blattinae. *Australian Journal of Zoology* **16**: 511-575) lists localities in Victoria and South Australia for the species but makes no mention of it in the ACT. A check of the Australian National Insect Collection (ANIC) reveals few records in addition to those noted by Mackerras from the southern part of the continent. From the early 1990's to the present, there are numerous records from Canberra and environs. April is the commonest month for adult collection, but they also have been collected at other times of the year. In autumn adults may tend to enter dwellings to avoid cold weather, thus accounting for the skewed collection records for that time of year.

In the early 1990's, public interest in the species was restricted to a few observations per year. It has steadily grown to rather startling levels. They are so common in houses that people not only complain about their presence, but also about the strong odour they emit when they are handled. The species seems quite capable of surviving indoors and egg cases as well as nymphs have been found at several times of the year. Females deposit egg cases in a variety of places ranging from paper serviettes on the dinner table to the linings of packages and on bread slices. They have been found in bags of potatoes but where they achieved entry is unclear.

With the intense amount of collecting done in the ACT, especially Black Mountain in the 1960's, it would seem that if the species was present then, it would have been collected by Mrs. Mackerras and others. All life stages are now commonly found alive in the halls of the ANIC. It is also commonly found in Canberra gardens, in leaf litter, wood chips and in and around firewood.

The most logical explanation for the presence of the Common Shining Cockroach in the ACT, and,

Common Shining Cockroach

perhaps, elsewhere in eastern Australia is its introduction in wood chips or nursery stock from Victoria or South Australia. It is not uncommon to observe other introduced orthopteroids in nurseries around Canberra. They all usually succumb to the extremes of winter, but this cockroach seems to be able to be able to survive both indoors and out in Canberra.

DCF RENTZ,
Bawley Point, NSW

# REGIONAL NEWS

## AUSTRALIAN CAPITAL TERRITORY

**CSIRO Entomology**

*Cotton Pest Management*

It has been quite a while since the cotton pest management project has been mentioned in *Myrmecia*, so a brief overview of our current research may be of interest. The project is based in Narrabri, Canberra and Griffith and is coordinated by **Geoff Baker**. Whilst **Gary Fitt** is now CEO of the Australian Cotton CRC, he still retains an active interest in the project's research. Core activities within the project include **Martin Dillon**'s work on area-wide management of *Helicoverpa* species, with special emphasis on trap-crops and the development of a Beneficial Disruption Index. This seeks to relate the type of pesticide use, profitability for farmers, and the role of beneficial insects. **Colin Tann**'s work focuses on various aspects of the ecology of *Helicoverpa* species and their seasonal activity, with particular attention to the efficacy of various refuge (no Bt) crop options that are grown in association with transgenic (Bt)

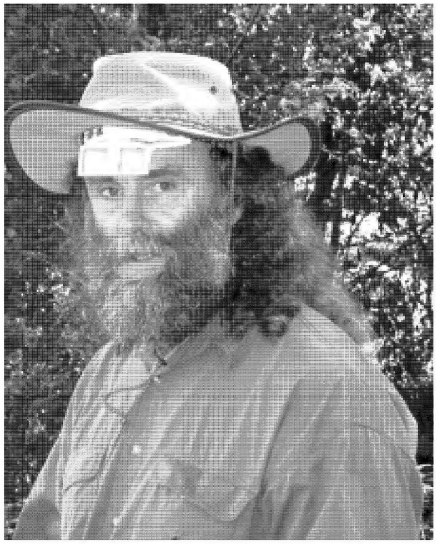
cotton to help reduce the likelihood of development of resistance to Bt amongst the moths. **Cheryl Mares**' work includes field and laboratory evaluation of the performance of a wide range of conventional and transgenic cotton varieties against cotton pests and elucidating the factors (e.g. expression of Bt, other plant chemical defences) driving observed differences. This work links strongly with recent studies by **Karen Olsen** and **Rod Mahon** on the effects of environmental stress on the efficacy of transgenic cotton against *Helicoverpa*. In addition, Rod and Karen are interested in the development and genetic basis of Bt resistance and mapping this to the genome.

The past year or so has seen a growth in our research effort in natural enemies of pests in cotton. **Sarah Mansfield** joined the group to work on predators and their impact, especially ladybirds, ants and assassin bugs. **Mary Whitehouse** is working on parasitoids, especially their dispersal into and within cotton, the role of spiders (a group very understudied in cotton, given their abundance), and the non-target effects of transgenic cotton on invertebrates generally. **Andy Richards** has continued his work on the role of invertebrates (e.g. earwigs) in the dissemination of viruses (NPV) throughout the cotton crop to control *Helicoverpa*. Recently, Andy and Martin have teamed up to explore the potential of honeybees to disperse NPV to cotton flowers and thus bolster control of *Helicoverpa* there.

To complete the group, we now have **Scott Hardwick** investigating *Helicoverpa* in cooler regions in southern NSW, especially its population dynamics, resistance management and the role of trap crops and natural enemies in assisting with control amongst a mosaic of irrigated grain and cotton crops. Geoff Baker still manages to retain a small involvement in his work on the ecology and management of earthworms and pest Mediterranean snails in pastures and grain crops.

*ANIC*

In furthering the Division's exploration of Australia's insect diversity, **David Hollis**, the London-based specialist on Psyllidae who is here for three months, spent a weekend together with **Alice Wells** and **Laurence Mound**, looking for psyllids, caddis flies and thrips in rainforest remnants near Taree. Their guide was the conservation biologist, **Geoff Williams**, of the Lorien Wildlife Refuge. Between them they found at least six new gall-inducing thrips species. Visits to the fantastic rainforest remnant, Wingham Brush, with its 76 tree species including



Geoff 'thrips hunter' Williams

massive *Ficus* trees and 100,000 flying foxes, were alternated with sustenance at "Tellers" in Wingham's Old Bank Guesthouse – probably one of the best restaurants in rural NSW.

**Division of Botany & Zoology, ANU**

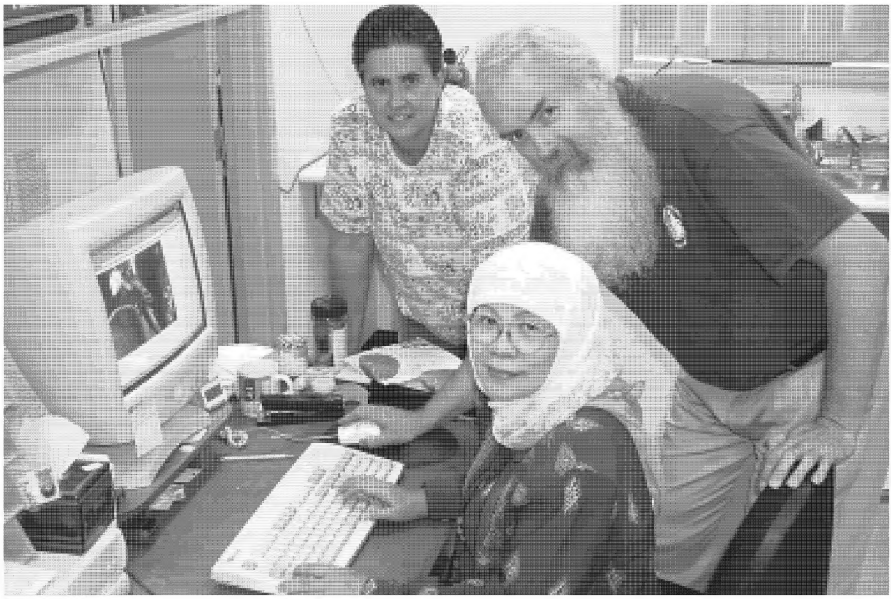
**Sophia Dimitriadis** is continuing working on her thesis, while **Stuart Dennis** went to the International Water Association World Water Congress in Melbourne. Stuart presented a poster of his work on the effect of waste water treatment on the presence of oestrogenic compounds. **Trudi Wharton** is in the final throes of writing a paper on the number of instars present in *Essigella californica*. **Linda Raynor** of Cornell University is currently visiting **David Rowell** studying the social behaviour of *Delena*.

Martin J. STEINBAUER
Regional Councillor

## NEW SOUTH WALES

**Orange Agricultural Institute**
**NSW Agricultural Scientific Collections Unit**

Visitors to the Unit have included **Marie-Claude Larivière** from Landcare Research, Auckland New Zealand, who spent five weeks working with **Murray Fletcher** expanding web-based keys to the Auchenorrhyncha to enable identification of the



Marie-Claude Larivière (NZ), Sri Suharni Siwi (Indonesia) and Murray Fletcher (NSW Ag.) working on their web keys. [photo: Kellie Bradley, NSW Agriculture].

New Zealand Cicadellidae to the level of species. **André Larochelle**, accompanied Marie-Claude and spent the time working on catalogues of the North American carabid beetles. **Sri Suharni Siwi**, Senior Scientist at the Central Research Institute for Food Crops in Bogor, Indonesia, also spent a week in the Unit establishing a project that will incorporate all the Indonesian and New Guinean Auchenorrhyncha species into Murray's web package as well to make it a comprehensive information resource on the leafhoppers, planthoppers and spittlebugs of the Australasian region. The Tri-Nation effort featured on the local news and in the rural press.

**Harley Rose** and **Stephen Cattle** from Sydney University dropped in for a tour of the Unit with 53 first year Agriculture students. Hopefully, some of them will have been inspired to take up entomology as a career.

New staff for the Unit include **Cecilia Lawler** and **Elizabeth Makkonen** who are employed under the NSW Biotechnology Strategy to help database the entomology collections. This funding will augment PHA funding which will be used to database those groups identified as being of highest priority for the Australian Plant Pest Database. It is expected that the entire insect and mite collection will be fully databased in BioLink by 2006. **Sally Watson** continues her employment on ABRS funding through the University of Sydney, but supervised at OAI by **Murray Fletcher**, to enter nomenclatural data on the Auchenorrhyncha into Platypus for incorporation into ABIF.

**University of Sydney, Orange**
**Faculty of Rural Management**

A rush of new postgraduate students has arrived at the University, and some of the new projects have significant entomological content. Most of the projects fall under the umbrella of the newly formed Centre for Ecology, Environment and Sustainability Research (CEESR) at the University and will be supervised by **Geoff Gurr**. **Mahmuda Begum** has just started a project looking at enhancing biological control of vineyard pests, **Aaron Simmons** is looking at wild relatives of tomatoes as potential sources of resistance to insect pests, and **John Macdonald** has commenced a study looking at diversifying understorey of tree shelter belts to boost biological control of pests in trees

and adjacent crops. John is jointly supervised by **Dieter Hochuli** of the main Univ. of Sydney campus, and **Steve Wratten** of Lincoln University, New Zealand. **Samina Rahat** has commenced working on the control of green vegetable bug in organically-grown soybeans, in collaboration with NSW Agriculture at Yanco. **Leigh Pilkington** continues his work on the Australian Lucerne Yellows phytoplasma disease and its leafhopper vector.

As an aside, discussions have led to the adoption of the word "Chapter" as the most appropriate collective noun for a group of students.

Recent visitors to the Orange Campus have included **John Charles**, Hortresearch, Auckland New Zealand, to discuss establishment of a PhD project to study the bionomics and population ecology of the Passionvine Hopper (PVH), *Scolypopa australis* (Ricaniidae) which has become a serious pest of kiwifruit in New Zealand. John's trip included field excursions to the Burrendong Arboretum near Wellington (NSW) where PVH was found in low numbers on native Myrtaceae and ferns and to **Murray Fletcher**'s side garden where PVH was found in very high numbers on a number of shrubs.

**Steve Wratten**, from Lincoln University, New Zealand, also spent a week in Orange to attend the launch of CEESR and to hold planning meetings with **Geoff Gurr** and his students.

Murray FLETCHER
Regional Councillor

**NSW Agriculture**
**Gosford Horticultural Research and Advisory Station**

**Alan Bishop** has just completed 4 months intensive fieldwork looking at the behavioural responses of *Culicoides brevitarsis* to various stimuli with the objective of blocking these stimuli to prevent the midge feeding on livestock. He will be presenting some of the results in a display at the Tocal field Days in early May.

**NSW Agriculture**
**Gosford National Centre for Greenhouse Horticulture**

**Marilyn Steiner** has just completed a 2 year project into the relationship between thrips feeding activity and damage to strawberry fruit. Originally intended to focus on western flower thrips, seasonal occurrences of *Thrips imaginis* and *T. tabaci* broadened the study. A damage threshold for thrips in strawberries was determined. A trial to investigate overhead misting as a thrips management tool in strawberries was also undertaken. Marilyn recently released her new thrips predatory mite (Montdorensis thrips predator) in an article in Practical Hydroponics & Greenhouses. Like other thrips feeding phytoseiid mite species it attacks the very young larval stages, but is amazingly mobile and has an impressive appetite. Trials are continuing in commercial crops to further develop its usage. Montdorensis is being used as part of a collaborative IPM program with Gabrielle Caon, SARDI and Alec Townsend, Greenhouse Manager, in the new Greenhouse Modernisation Project at Virginia. There has been significant interest in this new biocontrol agent since the article was published.

**Michael Brownbridge**, University of Vermont visited **Stephen Goodwin and Marilyn Steiner** late last year as part of a collaborative project on screening a range of fungal isolates of *Beauveria bassiana* and *Metarrhizium anisopliae* against western flower thrips, *Frankliniella occidentalis.* Further work will test these isolates against cotton aphid, *Aphis gossypii* and greenhouse whitefly, *Trialeurodes vaporariorum.* Michael, Stephen and Marilyn attended the HAL vegetables WFT review meeting at Virginia Horticulture Centre in October. During the trip South, they gave industry seminars on the development and use of fungi for pest management programs to SA greenhouse vegetable producers and to members of the Victorian Hydroponic Farmers Federation. Stephen and Marilyn are undertaking laboratory testing of the side-effects of a range of pesticides with emphasis on newer chemistry against the whitefly parasitoid *Encarsia*. and a similar program for the thrips predator *Montdorensis.*

Another area of research involves the identification of new biocontrol agents such as the midge predator *Feltiella* spp, the ladybeetle *Diomus* spp and brown lacewing *Micromus tasmaniae* for the Australian greenhouse industry. Stephen is very pleased to be at the end of a lengthy period of producing IPM manuals and field guides for ornamental and greenhouse vegetable producers and an accredited training course. This is a carry over from an earlier HRDC project that involved the collaboration of the Institute for Horticultural Development, Knoxfield and the Department of Primary Industries Queensland at Redlands and Nambour that has taken some time to complete. The ornamentals publications have been revised and are in their second edition. The first edition sold out within six months of their release. Stephen attended the 1st International Symposium of

Biological Control of Arthropods in Hawaii in January followed by a trip to British Columbia to meet up with colleagues at the Agassiz Research Station to discuss current research interests in greenhouse pest management and the upcoming meeting of the IOBC WPRS/NRS Working Group on IPM in Greenhouse Crops to be held on Vancouver Island in May. He also visited some very impressive greenhouse operations just outside Vancouver to look at IPM programs conducted by Koppert Biological Systems in vegetables and gerberas and modern production techniques.

Stephen GOODWIN

## NORTHERN TERRITORY

**NAQS Darwin**

A fairly quiet quarter. Visits by **David** and **Jean Hollis** of the Natural History Museum, London, and **Katsuyuki Yamaguchi** of Kobe University in Japan to look at and collect psyllids and tabanids respectively were most enjoyable. **Glenn Bellis** spent a few days with **John Donaldson** in Brisbane and has agreed to help John out with his revision of Australian Delphacidae. Should keep them both busy for a few years.

**Medical Entomology Branch**

In February **Peter Whelan** went on extended leave and **Nina Kurucz** managed day to day activities during Peter's absence. Enormous rainfall in the Katherine region created local flooding and mosquito breeding. MEB was asked to assist Katherine Environmental Health Officers in mosquito survey and control. **Jane Carter** travelled to Katherine three times, supported by **Brett Brogan** and Nina to participate in larval surveys and helicopter control operations. During this busy time **Allan Warchot** had to put in extra effort to keep up with mosquito survey and control around Darwin. Allan was supported by **Bernadette Haigh** who is also managing our database.

**Gisi Lamche** was surveying tyre yards as part of the exotic vector surveillance program. Nina organised the preparation of the annual report and regional reports were finalised. Our administrative officer **Catherine Goody** will be leaving by the end of April to follow a different career within the Defence Forces. We wish her all the best.

**Department of Business, Industry, Resource and Development (formerly DPIF) - Plant Health Branch**

The Resource Protection Division of the new DBIRD was restructured at the end of 2001 and the Plant Health Branch was created to encompass and integrate the Entomology, Plant Pathology and Interstate Quarantine Sections. **Stuart Smith** was appointed to the position of Manager, taking over many of the duties previously carried out by **Ted Fenner**. One of the big issues of the Branch is to complete the drafting of a new Bill to update and replace the current NT quarantine legislation. Ted had worked steadily on the new legislation but with both he and the legal officer's departure, the impetus has faltered somewhat.

Over the past 9 months or so, emphasis on the detection and incursion delineation of pests and diseases has switched from entomology to plant pathology. Surveys have included inspections for several diseases on grape vines across the Territory and the incidence of banana diseases in the Top End. No further detections of the exotic fruit fly *Bactrocera philippinensis* have been made despite an intensive monitoring program over the past 8 months. Similarly, Queensland fruit fly has not re-established in the Ti tree area of Central Australia following an eradication program last year. The quarantine group has been stretched to maintain the previous level of support in certification assurance of product and routine surveillance of pests and diseases. **Jim Swan** attended the Interstate Certification Assurance Working Group and **Stuart Smith** the Interstate Plant Health Regulatory Working Group meetings in Adelaide and Hobart respectively while **Peter Cawdrey** (Darwin) and **Carolyn Ellis** (Alice Springs) attended a training course in Brisbane for the detection of Red Imported

**Department of Business, Industry, Resource and Development - Entomology Section**

The skies are clearing and the humidity has dropped here in the Territory with the approach of the dry season. Conditions are a bit cooler (better known as warm and dry to the rest of the world) with the emergence of insects that usually appear at the end of the wet season such as rhinoceros beetles, longicorn beetles, mango tip borers and dragonflies. **Stuart Smith** left the section in February to take up his new role as Manager of Plant Health Branch (still with DBIRD). **Graham Brown** is currently the acting Principal Entomologist with three main roles of managing the Section, taxonomy and still keeping his duties as Quarantine Entomologist. Graham has been attending various management meetings as well as a quarantine entomologist meeting in Hobart, Tasmania. In what time he has left, Graham

has been working on the parasites of citrus leaf miner with **Megan Connolly**. Late last year Megan visited Bugs for Bugs in Mundubbera to discuss biological control agents for citrus. Megan and staff of Northern Territory University recently offered a workshop on the identification and control of redbanded thrips for mango growers in Katherine. Megan is currently on a weeks study leave in NSW to take part in her residential classes at Charles Sturt University. **Lanni Zhang** has continued to assist Graham with mounting scales and mealybugs on slides, process quarantine samples and has identified new records of eriophyid and diptilomiopid mites which she has had confirmed by **Danuta Knihinicki** at NSW Agriculture.

**Brian Thistleton** has settled into his position working on *Mastotermes* research. Brian and **Mike Neal** have made good progress on their soil injection trials in citrus and mango orchards and agroforestry blocks. They have also collected some data on mapping colonies of *Mastotermes* with dyes. Brian and Mike provided *Mastotermes* nymphs for **Dominique Parmentier** from Universite' Libre de Bruveller, Belgium to carry out her studies on termite development. Mike and **Heather Wallace** have had to evacuate from their termite laboratory so that renovations can be carried out on the building. In the meantime, Heather has been helping **Haidee Brown** with the backlog of processing specimens for the collection room (DBIRD museum) and updating the specimen database. Haidee has also been processing specimens collected by **Suzanne Gall** (contract casual staff) on surveys for "exotics" in the Darwin area.

**Bruce Dilley** who joined the section temporarily has been helping out wherever required. Bruce is now temporarily resting after he broke his ankle on a fishing trip. The rest of the section has been planning Bruce's return with a list of suitable jobs to cater for his injured condition. Unfortunately, he can only drive at one speed (fast) in his current status due to a heavy plaster.

**Deanna Chin** has been involved in extension enquiries, providing advice on the control of ants in dragon fruit blocks and working on a joint project with **Chris Wicks** from Horticulture on the post-harvest treatment of rambutans with petroleum and vegetable oils to control mealybugs, scales and other insects. Deanna and Stuart have been putting together information to write two ag-notes on integrated pest management for tropical tree crops. During March Deanna and Stuart visited a Kakadu Plum Plantation at Wildman River to demonstrate insect monitoring and discuss integrated pest management with **David Boehme** of Cognis Corporation. The trip out to the plantation involved was a pleasant journey in a four-wheel drive and involved travelling through two small creeks infested with saltwater crocodiles. After getting through the creeks, battling the insect pests at the end was easy!

Visitors to the section include **Qiao Wang** from New Zealand to view specimens of cerambycids, **David Hollis** from the Natural History Museum, London who is compiling a checklist of Australian psylloids and **Katsuyuki Yamaguchi**, parasitologist from Japan to collect tabanid flies.

**CSIRO Tropical Ecosystems Research Centre**

The last five months or so have been busy times for those in the invertebrate lab at CSIRO's Sustainable Ecosystems Darwin laboratory. In December, **Tracy Dawes-Gromadzki** and **Alan Andersen** attended the 5th Invertebrate Biodiversity and Conservation Conference held at Adelaide University. Tracy presented a paper on the development of a composite bait sampling protocol for sampling subterranean wood-feeding termites in a tropical savanna. Alan presented a paper on ant biodiversity in arid Australia.

Tracy Dawes-Gromadzki has recently started a new Tropical Savannas CRC project investigating how termites and other soil macroinvertebrates help maintain soil processes such as water infiltration and nutrient cycling. Previous work in the CRC has shown how soil conditions in savannas vary considerably from bare areas to grass tussocks, to near trees. Feeding patterns by soil macroinvertebrates are responsible for much of these differences. Studying the functioning of macroinvertebrate communities will help to better understand the dynamics of savanna soils. This will lead to better management and monitoring of soil conditions, and environmental health in the wet/dry tropics of north Australia. Recently published work showed that by encouraging termite activity in degraded savannas in West Africa, perennial grasses quickly re-established. Tracy is applying a similar technique to some degraded soils in Darwin to show whether the concept applies under Australian conditions. Within one week of applying mulch to hard, crusted soils, they observed termites, ants, millipedes, centipedes, and native cockroaches and silverfish colonising the site and starting to improve the infiltration rates. In late November, CSIRO held a workshop in Darwin to

ensure that the research is relevant to, and links with, existing work by agencies in the Northern Territory in the area of soil health. Representatives from the NT Department of Buisness, Industry and Resource Development, NT Department of Infrastructure, Planning and Environment, Earth Water Life Sciences Pty Ltd, Greening Australia NT, the Environment Centre NT, and the Tropical Savannas CRC and private enterprise attended the half-day workshop. Another area of work within this CRC project, is investigating the extremes of land condition. With **Peter O'Reagain** from Queensland Department of Primary Industries and **Mike Webb** from CSIRO, Tracy visited stock exclosures in the Dalrymple shire of north Queensland, in December, and another trip is planned for May. Baiting and direct searches are be used to characterise the changes in invertebrate communities and relate this to changes in vegetative production and soil properties.

In collaboration with the NT Parks and Wildlife Commission, **Alan Andersen**, with the help of **Tony Hertog** and **Lyn Lowe**, has been busy in the field at Solar Village near Darwin, looking at the responses of ants to long-term fire exclusion. The first samples that were sorted turned up the exceedingly rare ponerine genus *Probolomyrmex*, which is a first record for the NT. Alan has also been providing the invertebrate input to a pilot rangeland monitoring project run by NSW Department of Land and Water Conservation. As part of the CSIRO, Alan is also collaborating with the Northern Land Council, Parks Australia and NT Government agencies to develop a proposal for the management of crazy ants (*Anoplolepis gracilipes*) in eastern Arnhem Land. This is one of the world's worst ant pests, and it poses a serious environmental and economic threat to northern Australia.

**Tony Hertog** has also been busy sorting and identifying ants and beetles from the Kimberley Regional Fire Management Project. Lyn has been sorting ants that have been collected from pitfall traps at Arafura Swamp, and in pitfall buckets during a mammal survey of the Muirella Park area in Kakadu National Park by the NT Parks and Wildlife Commission. Lyn is also sorting pitfall traps for ants, beetles, crickets and spiders from rehabilitated sites from the Callide Mine in Queensland.

**Ben Hoffmann** has been busy with a project focussing on the eradication of the African Big-headed ant from Kakadu in collaboration with Environment Australia. Work to date includes mapping its distribution within the park, and poisoning it from all areas outside of the township of Jabiru. Ben has just been employed on a term appointment to work on mining projects and to develop further research opportunities with ants. The third annual sample of ants from Callide mine in Queensland has arrived for identification. This consultancy,lead by Alan Andersen, uses ants as bioindicators of restoration success following mining.

We also have a couple of overseas students visiting the lab. **Martin Wegmann** is a student from Würzburg, Bavaria. Martin has previously conducted research projects in the rainforest of the Taï National Park, in the Ivory Coast, West Africa, where he studied amphibian communities on inselbergs in tropical rainforests. Here in Darwin, Martin is carrying out a research project within the framework of Tracy's soil macroinvertebrate project, for a Masters degree. He is investigating the effects of anthropogenic influences (primarily grazing) on termite communities, based on the use of GIS/RS data from the NT Parks and Wildlife Commission. **Kyle McKenzie** is an undergraduate student from Ohio, USA. Kyle is out here to conduct a research project as part of her undergraduate degree. Under Tracy's supervision she is quantifying the macroinvertebrate fauna (particularly termites) in soil pits on sites of different land condition. This work will contribute to the examination of potential links between macroinvertebrate diversity and abundance and soil health.

Martin SHIVAS
Regional Councillor

## QUEENSLAND - NORTH

**James Cook University**

**Angie Shuetrim** completed her Honours "Territoriality, colony structure and spatial dispersion in the intertidal ant *Polyrhachis sokolova*". Angie is now undertaking a PhD with **Simon Robson** and **Ross Crozier** on the evolution of disease resistance in social insects.

**Rudy Kohout** and Simon are driving to the Kimberleys and the Northern Territory for three weeks, in search of *Polyrhachis* ants. The survey is funded by ABRS and ARC.

JCU Postdoc **Mike Henshaw** is off to Darwin for two weeks looking for *Ropalidia*, funded by an ARC Discovery Grant. This is the first of many trips for Mike over the next 3 years.

Simon, ever the traveller, is also away to the Santa Fe Institute in New Mexico, USA in May, to attend a workshop on complex systems titled "Modelling

complexity across levels: social insect societies as multilevel integrated systems". In July he is off again, this time to Montreal for the Behavioural Ecology Congress. Later in July, Mike, Simon, Angie and heaps of people from Ross' lab are off to the XIV International Congress of IUSSI (International Union for the Study of Social Insects) meetings in Sapporo, Japan.

**QDPI – Entomology**

Northwatch Urban Surveys for exotic plant pests and diseases were completed in March for the Mackay to Townsville region. Approximately 100 sites were surveyed with no exotic detections. Staff collected spiraling whitefly as far south as Airlie Beach, and in response, the parasitoid wasp *Encarsia* was sent down for release.

**Jane Royer** and **Mick Berridge** had a chance to survey local islands for plant pests and diseases when they were offered spots on the new AQIS boat during a PR exercise on Green, Fitzroy and Double Islands. No-one threw up, though it was a bit choppy.

**Rob Bauer** has been busy with ongoing Crazy Ant surveillance. Happily, no ants have been detected since last November. Jane Royer will organise intensive rounds of surveillance in the hotspot area soon, with routine surveillance for the ant continuing until June 2002. Further south in Townsville, crazy ant infestations at the wharf are currently being treated with methoprene, due to the proximity to water.

**NAQS – Mareeba**

For the last few months, staff have been out of their minds preparing to test a new Biolink database. This system should be a huge leap forward from the current Access based database. In early March, **Kerrie Huxham** travelled to the Torres Strait to assist QDPI staff **Mark Trinca** and **Dan Healy** with installation of male fruit fly annihilation blocks. AQIS Torres Strait operational staff **Ron Enosa** from Saiba Island, **Aaron Gibuma** from Boigu Island and **Ibraham Bin Ahwell** from Dauan Island also assisted. Caneite blocks were placed on nine islands, with Kerrie hammering blocks in on Saibai, Dauan and Boigu. Blocks were placed in the community areas on each island, in 13 remote sites on Boigu, and 2 remote sites on Saibai and Dauan Islands. This collaboration gave Kerrie the opportunity to become familiar with the blocking procedure and the remote sites themselves, which are not usually visited on a regular fruit fly run. Remote sites are potential trapping and breeding sites for fruit flies. Kerrie then joined botanist **Barbara Waterhouse**, plant pathologist **Richard Davis** and NAQS Darwin vet **Emma Watkins** in a joint Plant/ Animal health survey of some of the Torres Strait islands. In April, **Judy Grimshaw** popped up to Cooktown for a general plant health survey of the community and surrounding environs. In May, Kerrie departed for Stellenbosch to attend the International Fruitfly Symposium, where she presented a paper on the fruitfly monitoring system NAQS employs.

Kylie ANDERSON
Regional Councillor

## QUEENSLAND - SOUTH

**Tropical Fruit Fly Research Group**
**Australian School of Environmental Studies**
**Griffith University**

The TFFRG continues to be the hub of a considerable level of activity. **Tony Clarke** has moved from Griffith University to take up a permanent job at Queensland University of Technology as a Lecturer in Ecology. He will be missed. However, Tony still continues to interact with the group as a collaborator in research projects and student supervision. We have a new addition to the lab in **S. Vijayasegaran** (Vijay) who has taken up a position as Research Fellow on the group's new project in Vietnam (Managing fruit flies to increase food (fruit and vegetable) production in Vietnam) funded by ACIAR. This project is being headed by **Dick Drew** and Vijay. In connection with this project Vijay and **Meredith Romig** have made visits to field sites in North and South Vietnam to initiate the fieldwork and data collection phase of the project. A high level diplomatic delegation from Vietnam visited the lab to observe the progress being made and to have discussions with the project leaders.

**Amy Lawson** continues to make considerable progress in developing a LUCID key to the *Bactrocera dorsalis* complex of fruit flies (a major pest group in the Asia-Pacific). Currently she is developing a subkey, for certain problematic species, based on morphometric data being meticulously gathered by **Peter Halcoop** and Dick Drew. Dr. **David Yeates** (CSIRO-Entomology, Canberra) visited the lab in his capacity as a collaborator in this project and has been providing his critical inputs towards the development of the key.

**Barbara Clifford** is finalising the data sets from the PNG fruit fly project. **Ann Beames** and Barbara

continue to add to and curate the group's reference collection of fruit fly specimens at an impressive rate.

The group has two new students. **Karen Hurley** has started her MPhil on the behaviour of fruit flies in relation to protein sources. **Solomon Balagawi**, from the National Agricultural Research Institute, PNG, has taken up a John Allright Fellowship (ACIAR) towards an MPhil at GU with the group. **Raghu** is currently writing up his PhD thesis and associated papers.

S. RAGHU

**Alan Fletcher Research Station**

**Cathy Lockett** spent a few days visiting AFRS to discuss biocontrol of *Lantana*, Prickly Acacia and *Parthenium*. Cathy plans to begin rearing insects for the control of *Lantana* at Charters Towers in the near future.

Michael DAY

**Army Malaria Institute (AMI)**

**Bob Cooper** spent 3 weeks of late March to early April in Hanoi, Vietnam, visiting the Department of Military Medicine, Vietnamese Army. He also visited the Department of Entomology, AFRIMS, Bangkok, Thailand, for discussions with **James Jones**. In early April **Bruce Russell** departed Australia to work at AFRIMS, Bangkok, for a 2-year period.

Recent visitors to the institute were **Tony Sweeney** and **Nigel Beebe**, University of Technology, Sydney, who discussed future work with **Bob Cooper** and **Steve Frances** involving GIS and mosquito distribution. **Steve Barker** from the University of Queensland visited to discuss a future honours project for **Cassie Jansen**.

Steve FRANCES

**CSIRO Entomology, Long Pocket**

Our friend, colleague and mentor, **Lindsay Barton Browne**, is returning to Canberra after spending 12 years in Brisbane in his role as an honorary research fellow. We all thank Lindsay for his good company and inspired scientific guidance and wish him the best for the future.

**Paul De Barro**, **Don Sands** and **Marc Coombs** attended the First International Symposium on Biological Control of Arthropods at Honolulu, Hawaii 13-18 January. Paul De Barro presented a joint paper with **Stefan Schmidt** (CSIRO Entomology Canberra) on Australian native whiteflies and their parasitoids; Don Sands and **Jim Cullen** (CSIRO Entomology Canberra) made a presentation honouring the lifetime achievements of Doug Waterhouse. Don also presented a paper co-authoured with **Roy Van Driesche** (Univ. Massachusetts) on developing techniques for host range testing of arthropods in quarantine. Marc Coombs presented a paper on post-release evaluation of the green vegetable bug parasitoid *Trichopoda giacomellii*.

**Shama Khan** and **Veronica Brancatini** have been revamping a quarantine facility at the CSIRO Long Pocket Laboratories in preparation for importation of new parasitoids (*Eretmocerus* spp.) for host range testing against silverleaf whitefly *Bemisia tabaci*.

**John Goolsby** reports that a second biocontrol agent for *Melaleuca* has been released in Florida, USA. The paperbark tree, *M. quinquenervia* was introduced into Florida in the United States at the beginning of this century. In the last 30-40 years, *M. quinquenervia* has greatly expanded its range in southern Florida where it now infests over 200,000 hectares causing extensive environmental and economic damage. Trees, which can grow to 30m in height, flower and seed prolifically and form dense forests that displace native plants and animals. A joint biological control program for *Melaleuca* was initiated between the United States Department of Agriculture (USDA), Agricultural Research Service and Commonwealth Industrial and Science Research Organisation, Division of Entomology (CSIRO). The USDA operates the Australian Biological Control Laboratory (ABCL) with CSIRO to conduct research on biological control of plants that are native to Australia and Southeast Asia and have become weeds in the USA. This interaction leads to sharing of research findings and the exchange of biological control agents, thus benefiting to both countries.

The first biological control agent, the melaleuca weevil, *Oxyops vitiosa* was released in 1997. The weevil is now well established and having a considerable impact on melaleuca in southern Florida. A second agent, the melaleuca psyllid, *Boreioglycaspis melaleucae* was released in Florida USA on 12th of February this year. The melaleuca psyllid was originally collected near Brisbane, Australia by **Matthew Purcell** (CSIRO Entomology). ABCL staff members Matthew Purcell, **Jeff Makinson**, **Joe Balciunas**, and the late **Charlie Turner** all contributed to the evaluation of this agent in Australia. **Gary Buckingham** and **Susan Wineriter** (USDA) conducted the quarantine screening in Florida. **Ted Center** (USDA), the *Melaleuca* project leader, reports that two months after release, the melaleuca psyllid is

established locally and spreading. The joint CSIRO/ USDA team is optimistic that the psyllid will have a lasting impact on melaleuca and in a broader sense contribute to the long term conservation of the Florida Everglades.

Research on *Parkinsonia aculeata*, a weed of national significance, has recently received a leg-up. **Rieks van Klinken**'s work on plant ecology and impact of released biocontrol agents has expanded with federal NHT funding. From the same source, surveys of natural enemies as potential new biocontrol agents have been funded. **Tim Heard** and **Ricardo Segura** recently travelled to Costa Rica and Nicaragua to initiate these surveys. While in Costa Rica, they attended a conference on the Globalisation of Agricultural Research.

Surveys for new biological control agents for another WONS weed, alligator weed, began late last year in Argentina. **Alejandro Sosa**, based at **Hugo Cordo's** USDA lab in Buenos Aires was appointed to the project and in November **Mic Julien** joined surveys in northeastern areas and areas south and east of Buenos Aires.

Mic Julien, and Rieks van Klinken in company with **Darren Kriticos**, **Ric Roush**, **Rachel McFadyen** and **Dane Panetta** visited South Africa to explore opportunities for collaboration on weeds research of common interest to the two countries. Recommendations are being prepared for the Department of Education, Science and Training that supported the delegation.

The bellyache bush (*Jatropha gossypiifolia*) project is steaming along with progress on several fronts. **Richard Chan** has finished host testing the first biocontrol agent against this weed, the scutellerid *Agonosoma trilineatum*. **Tim Heard** and **Ricardo Segura** found this insect in Venezuela. Tim and Richard will soon make an application for permission to release. **Cathy Lockett** visited Long Pocket to learn more about this insect, as she will be responsible for its rearing and release in north Queensland. A workshop on the management of bellyache bush was held in February at Long Pocket Labs and a report describing current work and listing research priorities is available.

The mimosa project is achieving its goals with biocontrol agents making some important gains. New agents that attack the leaves are still needed. The latest agent (number 13) is *Macaria pallidata*, a consummate leaf-consuming geometrid from Mexico. **Tim Heard** and **Areli Mira** submitted an application to release this agent and hopefully releases will be made this wet season. **Nadine Graham** and **Bruce Hutchings**, NT DBIRD, visited Long Pocket for a week to learn rearing techniques for *Macaria* and *Agonosoma* the next bellyache bush agent.

Ricardo Segura and Mic Julien surveyed in Venezuela and Mexico late last year for potential agents on hyptis (*Hyptis suaveolens*) a bellyache bush. Morphological variation in hyptis and the differences in insect diversity and numbers between plant populations suggest that this species needs revision. Plant collections have been sent for assessment and DNA comparisons are underway. So far studies conducted by **Gio Fichera** on various insect species collected from hyptis have resulted in their being rejected as potential agents or they failed to breed on the Australian hyptis type.

Marc COOMBS

**Queensland Museum**

**Chris Burwell**, **Doug Cook** and **Susan Wright** accompanied by **Barbara Baehr, Robert Raven (Arachnology QM), John Stanisic** and **Darryl Potter** (Malacology QM) spent a week in January collecting on Stradbroke Island. Some of the gems collected included several uncommon Christmas beetles (Scarabaeidae: Rutelinae) and a specimen of the giant dragonfly, *Petalura litorea*. In February, **Ross Storey** in Mareeba had visitors in the form of **Geoff Monteith** and **Geoff Thompson** who spent most of the time light trapping and paying close attention to the dung beetles on and around his property. Geoff Monteith will make a return visit in April. In March Geoff Monteith, Doug Cook and Susan Wright ended nine days of investigating various patches of vinescrub around Roma with Bug Catch which turned out to very profitable. Meanwhile Chris Burwell and **John Heraty** (University of California, Riverside) spent two weeks chasing the elusive Mallee Monster, the chalcid wasp *Akapala* (Family Eucharitidae). They spent a week in Mt Isa and another in Alice Springs with a few days in Cairns due to the lack of direct flights between the first two spots. Unfortunately the beast eluded capture but several related taxa were collected so the trip was still successful. Following his successful visit to the Museum of Comparative Zoology at Harvard University, funded by an Ernst Mayr Award Grant, **Rudy Kohout** will be leaving soon for a 6 week trip to north-west Australia. He will be accompanied by **Simon Robson** (James Cook University, Townsville) and both will visit Lawn Hill in the Gulf Country, Katherine Gorge and Kakadu in the Northern Territory and the Kimberley and Pilbara districts in northern Western

Australia. This trip is funded primarily by Rudy's ABRS Research Grant, with partial support from Simon's ARC Research Grant.
Visitors over the last few months have included **Darryl Gwynne** (University of Toronto) studying king crickets, **David** and **Jean Hollis** (Natural History Musuem, London) looking at psyllids, and **Richard Leschen** (Landcare Research, Auckland) searching for an particular cerambycid in our collection and also looking at cucujoid beetles. **Ottilie Neser** (Plant Protection Research Institute, Pretoria) spent a couple of weeks looking at A.A. Girault types of *Bruchophagus* and other eurytomids. **Chris Darling** (Royal Ontario Museum, Canada) visited briefly before he too headed off to Mt Isa for another disappointing search for *Akapala*. However he managed to spend some profitable hours with some of the locals at the Boyd Hotel. He then met up with Geoff Monteith on a return trip to New Caledonia. **Michael Wall** (University of Conneticut) is working on the taxonomy of reduviids and pentatomids and also made a brief visit to look at the collection.
In December, 2001 Robert Raven & Barbara Baehr gave a 3-day workshop on spider identification (using paper keys and real spiders) for 20 people from Perth, Canberra, Sydney & Brisbane. In January, **Norman I Platnick**, American Museum of Natural History, visited the museum and with Barbara Baehr & Robert Raven went hunting a new lamponid genus (and other grist for a DNA "mill") just south of Texas. A group of scientists focused on the araneoid clade visited the museum in April and will collect in south-east Queensland and north-east Queensland. They are: from the Smithsonian and George Washington Univ, USA, **Gustavo Hormiga** and his PhD students **Matjaz Kuntner** and **Fernando Alvarez**; from the Zoological Museum of Denmark, **Nikolaj Scharff** & his student **Sidsel Larsen**.

Susan WRIGHT

Along with the above, her final contribution as Regional Councillor, **Heather Proctor** asks the following question:
What is harder to collect than a stilbopterygid?
**ANSWER**: A movingbopterygid!

## SOUTH AUSTRALIA

### Butterfly Conservation

The Nature Foundation of SA recently undertook a conservation campaign based on butterflies. Publicity was fantastic with several articles in the "Adelaide Advertiser". The Foundation has also announced three postgraduate scholarships, one per year at each of the SA universities. Web site: <http://www.naturefoundationsa.asn.au/>

### SA Museum

**Archie McArthur** was awarded a Medal of the Order of Australia for services to entomology and to the environment through the collection and study of ants, and to the community, particularly through the National Parks Consultative Committee for the Lower South-East area, SA.
**Robert Lavigne**, Professor Emeritus Univ Wyoming USA is working as a volunteer in the South Australian Museum on the robber fly (Diptera:Asilidae) collection.

### University of Adelaide

Congratulations to the AES President, **Andy Austin**, who was promoted recently to Professor of Entomology at the University of Adelaide. Andy indicated that he hoped his promotion can be used to raise the profile of entomology in Australia, particularly in the area of undergraduate and postgraduate training.
"BioED", an interactive CD-ROM system to facilitate the easy identification of animals, plants and micro-organisms for University undergraduate classes had its Adelaide launch in Feburary. Professor **Penny Boumelha** (DVC Education) launched the CD, that was developed by research groups at Adelaide, Queensland and Sydney Universities. The CD was funded by a large grant from the Committee for University Teaching and Staff Development - CUTSD. The University of Adelaide component (A Key to Hymenopteran Families) was developed by **Andy Austin**, **John Jennings**, **Muhammad Iqbal** and **Nick Stevens** from the Centre for Evolutionary Biology & Biodiversity. The university media release was picked up by many media including a half-page spread in "The Australian".
**Volker Framenau**, University of Melbourne, presented an informal talk titled "Behavioural ecology of riparian wolf spiders (Araneae: Lycosidae)" to Andy Austin's and John Jennings' lab. Group at the Waite Campus. Volker spent a couple of weeks with **Travis Gotch**, PhD candidate, including a visit to a number of mound springs in the north of the state.
In February, **Gary Taylor** hosted a visit by **David Hollis** (Natural History Museum, London), and his wife Jean. David is compiling a monograph of the Australian Psylloidea, and preparing a much-needed comprehensive key to genera for the Australian

psylloid fauna. His visit included several days with **Jan Forrest** at the South Australian Museum, sorting a large amount of accession material to genera.

In April, **Don Dahlsten**, Center for Biological Control University of California, Berkeley and **Daryl Ross**, Department of Forest Science, Oregon State University visited Gary Taylor to collect parasitoids of two species of psyllid that have become a major problem in Southern California. One of the species is the spotted-gum psyllid, *Eucalyptolyma maideni* Taylor, that produces fern-leaf shaped lerps, and the other is the lerp-inhabiting commensal *Cryptoneossa triangular* Taylor. Both species are damaging ornamental *Eucalyptus citriodora* and *E. maculata* by causing leaf senescence, supporting growth of sooty moulds and fouling pathways and vehicles. A week of successful collecting resulted in several shipments of *Psyllaephagus* parasitoids back to the US.

John JENNINGS
Regional Councillor

## TASMANIA

**University of Tasmania**

*School of Ag. Science/CRC for Sustainable Production Forestry*

A visit by **Allan Carroll** (Canadian Forestry Service), currently working with **Martin Steinbauer** (CRC-SPF Canberra) in Canberra, was made over Easter. Allan gave a seminar on mountain pine beetle research and met with staff and graduate students during his stay. **Mick Statham** (TIAR Launceston) has been running a European wasp bait trial in southern Tasmania. **Ian Warren** has been doing the leg work and after a slow start to the wasp season is now able to get sufficient numbers to run the trials. **Luke Rapley** has developed a very successful 'search image' for autumn gum moth pupae and will be and is setting up many oviposition tent trials for the emerging moths to entertain themselves. **Marie Yee**, **Helen Nahrung** and **Anthony Rice** have just finished their final and also profitable field seasons. **Geoff Allen** has begun sorting an opportunistic pilot experiment looking at the recovery of leaf beetles and natural enemies following aerial spraying with a synthetic pyrethroid. In March he had a rapid trip to QFRI (Indooroopilly) in relation to the research direction of any new CRC's in forestry. Indeed with the politics of the currently developing forestry CRC bid(s) the potential scenarios for forest entomology vary on an almost daily basis. Finally, forest research activity will certainly be much for the poorer with loss of **David De Little** from Gunns Ltd following a restructure of priorities by that Company.

**Forestry Tasmania**

**Dick Bashford**, **Niall Doran**, **Michael Driessen** and **Alastair Richardson** have completed the altitudinal transect survey work at Mt Weld/Warra and are preparing an invitation paper for IBOY. Dick has also completed the canopy/bark misting IBOY project field work at Warra looking at the invertebrate fauna of old growth *E. obliqua* trees. **Alan Carroll** (Canadian Forestry Service) visited to talk to **Jane Elek**, **Simon Grove**, **Adrien Goodwin** and **Tim Wardlaw**, and then went out in the field with Tim, **Mamoru Matsuki** (CRC-SPF) and **Caroline Mohammed** (Uni Tas.) to look at some *Mycosphaerella* trials. Mamoru also showed him some sights of Tasmania over Easter.

Geoff R. ALLEN
Regional Councillor

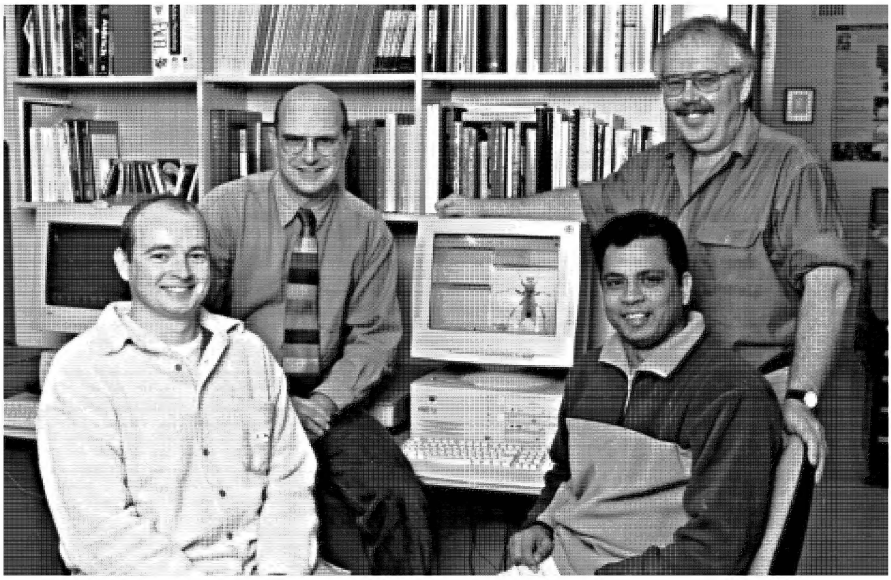
## VICTORIA

**Keith Turnbull Research Institute**

Visiting scientists **Doug Landis** (Michigan State University) and **Stan Finch** (Horticulture Research International, UK) recently delivered lectures at KTRI on "Designing Landscapes for Enhanced Dispersal and Impact of Insect Natural Enemies" and "A new theory of host-plant selection by insects" respectively. The opportunity to participate in NRE's Visiting Scientists Program is certainly appreciated by all at KTRI.

**Greg Lefoe** conducted the first releases of the elm leaf beetle parasitic fly *Erynniopsis antennata* at three locations in Victoria; central Melbourne, Lilydale and Alexandra. **Jo Wood**, **Michael Lindeman** and **Jean Louis Sagliocco** provided valuable support, processing thousands of elm leaf beetles in quarantine to recover several hundred parasitoids. These releases generated considerable interest from the media and the general public, with many elm owners phoning to "get some flies for my tree". In December 2001 Greg attended the European wasp workshop at the University of Adelaide. The gathering of wasp researchers from around Australia and New Zealand has become an annual event and wasp research has benefited from the opportunity to exchange information and ideas.

It has also been a busy period for KTRI's weed biocontrol projects. **Troy Gallus** has been monitoring sites where the Ragwort plume moth *Platyptilia isodactyla* was released between 1999 and 2001. Troy has recovered the moth at most

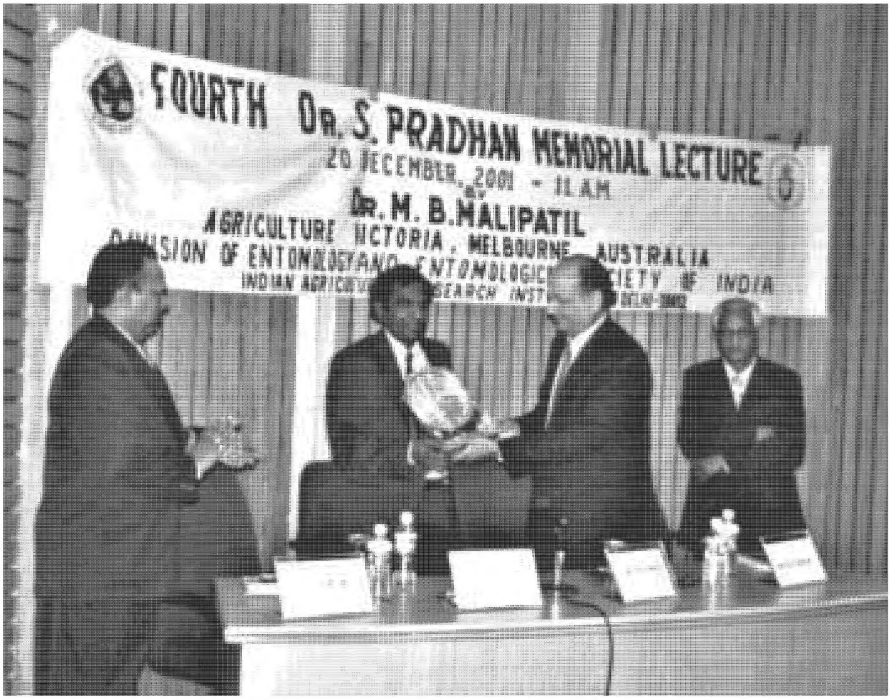


Nick Stevens, Andy Austin, Muhammad Iqbal, John Jennings and "BioED"

release sites. Further releases of the moth were conducted at 17 sites in southern Victoria this financial year. There was further good news from a survey conducted by **Jean Louis Sagliocco** and **John Weiss** in November 2001. Jean Louis and John confirmed establishment of the Horehound clearwing moth *Chamaesphecia mysiniformis* at Wyperfeld National Park. And 30 landholders, a Green corps group, and several NRE staff took part in a Paterson's curse field day organised by **Kerry Roberts**. The aim of the field day, held at Euroa in northeastern Victoria, was to collect and redistribute the Paterson's curse crown boring weevil *Mogulones larvatus*. Thirty thousand weevils were collected from Euroa and another location at Tullamarine for redistribution to 29 new sites.

**Institute of Sustainable Irrigated Agriculture**
The Plant Protection team at NRE Tatura hosted **Larry Gut** and **David Epstein**, both from Michigan State University in Feb-March. David is the IPM Co-ordinator for Tree Fruits. Larry is a pheromone expert, working with **Dave Williams** and **Alex Il'ichev,** on a new international collaborative project on mating disruption of codling moth and OFM. While in Australia Larry and David travelled with Alex to NSW to visit **Ron Gordon** (Batlow) and **Graham Thwaite** (Orange) to discuss mating disruption and other aspects of IPM in orchards, before participating in an EMS workshop at NRE Knoxfield. Larry is likely to be back in Australia as part of the project team in December so anyone wanting to meet him please contact either Dave or Alex at Tatura (0358335222). Dave Williams caught up with Graham Thwaite at a spray application workshop at Attwood in March and the intrepid fruit entos have started work on the codling moth module for the pome fruit integrated fruit production (IFP) system. Dave also found out recently that the NRE Enhancing Science Visiting Fellows Program has approved funding for **Mark Whalon** from Michigan State University to spend 6 months on sabbatical at Tatura. Mark has specialised in resistance management and more recently has begun investigating the active components of organic teas, ameliorants and the responses of plants to insect attack. Mark will be at Tatura from November 2002-March 2003. Contact Dave at Tatura for further details.

**Museum Victoria**
In August 2000, the entomology collection and staff, along with most other Museum departments, moved




Mali Malipatil honoured at IARI, New Delhi (see Myrmecia **38**/1:27)

into a new Museum site. Unfortunately, the Abbotsford mail post office is not redirecting mail to the new address and this has caused some confusion with the return of specimens to the sender. Please ensure material sent to the Museum is addressed to: GPO Box 666E, Melbourne Victoria 3001.

Other recent changes are the result of a staff restructure during 2001. In particular, **Alan Yen** and **Ross Field** unfortunately no longer work at Museum Victoria. Alan has relocated to LaTrobe University, while Ross has moved back to the Department of Natural Resources and Environment. On a brighter note, staff have settled into their new quarters and resolved most of the initial teething problems. **Bev Van Praagh** has continued to be successfully funded with Eltham Copper and Giant Gippsland conservation grants. **Richard Marchant** is investigating Caddisfly life histories on the Cumberland River, in the Otways. **Ken Walker** has just returned from a 5 week bee collecting trip to South Africa. While his first trip last spring concentrated on the bee fauna in western South Africa and followed the winter rains, this trip concentrated on the eastern side of South Africa and was timed to follow the summer rains. Representatives of all rare, endemic halictine genera and subgenera were collected. Collection of these species was essential to an international collaborative project designed to produce a global phylogenetic review of *Lasioglossum*.

Ross FIELD
Cathy MANSFIELD

**Entomological Society of Victoria.**

Instead of a speaker at the February meeting **Ian Endersby** prepared and discussed a booklet on collecting techniques for amateur entomologists and **Daniel Dobrosak** demonstrated how to set different Orders.

The current seven member council has served, in aggregate, more than 60 years caring for the Society. Driven somewhat by a sense of fatigue, but more importantly because there has been no professional entomological presence at the Society

for a number of years, the Council is considering a status document prepared by one of its members. There was a time when the Society was a de facto chapter of the Australian Entomological Society for its Melbourne based members. Amateur members who previously enjoyed discussions with a group of mentors are expressing their disappointment about this trend.

In March each year the Field Naturalists Clubs of Victoria combine for a camp where they develop new skills and brush up on their old ones. This year 99 members representing 16 clubs attended. The lucky ones spent three days with Ian Endersby setting pit, pan and light traps, logging insect behaviour, direct searching vegetation and sampling the murky dam. For those who appreciate such things the highlight was an aquatic pyralid larva which gets lost halfway through **John Hawking**'s key to the subfamily Nymphalinae.

With an international conference on the Odonata scheduled for January 2003 in Beechworth, Victoria, the Society is exploring ways in which it can assist.

Ian ENDERSBY

## PAPUA NEW GUINEA

PNG's First Crop Protection Workshop, organized by the National Agricultural Research Institute was held at the Melanesian Hotel, Lae from 12-14 February, 2002. This was the first conference bringing together entomologists, plant pathologists and weed scientists from all agricultural research institutes in PNG. PNG experts from Australia, for example, **Bruce French** and **Martin Gunther** were also present. A notable missing person was **Fred Dori**.

The workshop was formally opened by the NARI Director General, **Valentine Kambore**, who also launched **Ray Kumar**'s book *Insect Pests of Agriculture in Papua New Guinea*. Ray Kumar provided an overview of Plant Protection in PNG. Young PNG scientists presented over 30 papers on various crop protection topics, and the Proceedings of the workshop will be published.

One full session considered current pest control recommendations. Two sessions were devoted to the priority ranking of pests found in PNG. This generated considerable discussion and it was decided that a final list would be circulated to the participants for comments.

The next Crop Protection Workshop will be organized by T.V. Price, the foundation Professor of Agriculture at the Vudal University, Rabaul.

Ray KUMAR
Regional Correspondent

## INFORMATION REQUEST

### Clyde Coleman and the natural history of North Queensland

Clyde Coleman was born at Stannary Hills (near Herberton North Queensland), on March 20, 1913, the sixth child of a family of eleven. He was educated at the Stannary Hills school and left home at 13 following the untimely death of his mother. Until the outbreak of World War II, Clyde followed many occupations, including mining, cane cutting, tobacco growing. Joining the Army in April 1941, he served as an electrician with several Engineer and Armoured Corps units in Australia, saw service in Bougainville and Moratai, and joined the British Commonwealth Occupational Force and was posted to Japan at the end of the Pacific War. There he saw the devastation of Hiroshima, caused by the atomic explosion. He also saw the care of the Japanese farmers for their soil, and heard their saying that every grain of soil in Japan has passed through human fingers.

Clyde's Army experience had a profound effect on his thinking. Upon discharge in 1947, he decided that he must acquire a trade and with this as a base, further his education. A rehabilitation course qualified him as a motor mechanic, and for eight years he underwent a course of study with an orientation towards science subjects, settling at Edmonton a small township about 15 km south of Cairns. During his lunch hour, he collected specimens within reach of his work place. At his home he carried out experiments in horticulture, built up a wide scientific library, and equipped himself with microscopes and sophisticated photographic equipment. In addition he wandered far into both wet and dry natural habitats collecting and demonstrating to students and scientists, the natural history wonders of the northland. He also found time to contribute to scientific journals, and write letters to the media and to his many friends and contacts.

Tragically, Clyde died on 8 April 1981, as a result of burns received when his home was destroyed by fire during the early morning of the previous day. News of this remarkable man's death shocked not only his many friends and associates in Far North Queensland, but also field naturalists at national and international level. Ramon Mascord, a life member of AES and a leading arachnologist, wrote

that Clyde found hundreds of new species in North Queensland, and many of the genera he discovered were only known in other countries before he found them in and around Edmonton.

Spiders were not Clyde's only interest. His dedication as a collector extended to all fields of natural history, while his expertise as a nature photographer won him wide recognition. As a bushman he was superb; he knew every inch of the Cairns Hinterland and coastal lowlands, a knowledge he shared unselfishly with both amateur and professional naturalists.

Sadly, most of his research material was destroyed in the fire. However 2000 colour slides and his correspondence with the Queensland Museum have survived. This letter is an appeal for information and I would request that readers dust off the old scrap books and magazine collections in an effort to reveal more of his research. I will reimburse postage and photocopying expenses.

Bruce HENDERSON
<bruce.henderson@bigpond.com>

## NOTICES

**NSW Biodiversity Research Network**

This network has been established to facilitate communication and cooperation among stakeholders in research on biodiversity in NSW. These stakeholders include government, private and community organisations, and individuals - both those who do the research, and those who use the research. Currently biodiversity research is coordinated to some extent within government agencies, but not across all research organisations. There is a need for more consultation among organisations before research programs are established, and for greater coordination of existing programs.

One of our goals is to identify gaps and priorities for biodiversity research in NSW, and to outline these in an upcoming website and NSW Biodiversity Research Strategy document. Our website will also summarise and link the research of relevant organisations, and thus serve as a central point of reference for biodiversity researchers and students in NSW. We also aim to form enduring links among people, by providing opportunities for communication, such as an electronic mailing list, newsletters, and meetings or mini-symposia. The outcomes will be increased awareness of biodiversity research priorities among stakeholders, better coordination of biodiversity research and funding bids across agencies, and an improved basis for biodiversity management and conservation in NSW.

The initiative for this Network arose out of the NSW Biodiversity Strategy (hard copy published by the National Parks and Wildlife Service, 1999; available online at http://www.npws.nsw.gov.au/services/index.html). The Network Steering Committee now holds regular meetings of interested agency and university partners. Current and past members of the Steering Committee include representatives from National Parks and Wildlife Service, the Australian Museum, the Royal Botanic Gardens Sydney, the University of Sydney, the University of Wollongong, Macquarie University, NSW Fisheries, the Department of Land and Water Conservation, CSIRO, the Zoological Parks Board, NSW Agriculture, and NSW State Forests.

If you would like to get involved, or receive further information, please contact:

Meri PEACH
NSW Biodiversity Research Network Coordinator
Royal Botanic Gardens Sydney,
Mrs Macquaries Road,
Sydney, NSW, 2000.
Telephone: 2-9231 8159; Fax: 2-9251 4403
Email: Meredith.Peach@rbgsyd.nsw.gov.au

## MEETINGS

**3rd International Forest Canopy Conference**

Cairns International Hotel, Queensland,
23 - 28 June 2002
http://www.premiers.qld.gov.au/about/science/canopyconference/

**2nd International Congress on Phthiraptera**

8-12 July 2002, University of Queensland, Brisbane. See: www.imb.uq.edu.au/ICP2

**5th International Congress of Dipterology**

September 30 – October 5, 2002
University of Queensland, Brisbane

The International Congress of Dipterology will bring together 300 researchers from a broad range of disciplines to discuss the latest research on Diptera (true flies). The Program will be designed to provide a unique environment in which to discuss current research. Themes will include: Morphology, Physiology and Ultrastructure; Biodiversity and Conservation; Agricultural Diptera; Behaviour and Ecology; Medical, Veterinary and Forensic Diptera; Systematics and Phylogeny; Genetics and

Genomics; Collections and Databases
Please see our web site at http://www.uq.edu.au/entomology/dipterol/diptconf.html
ICD5 Congress Secretariat, Conference Connections, PO Box 108, Kenmore, Queensland, Australia 4069; Fax (61 7) 3201 2809; email <sally.brown@uq.net.au>

**International Symposium on Exotic Pests and their Control (ISEPC)**
**Zhongshan University, Guangzhou, China**
November 17 to 20, 2002
Secretary General: Prof. Runjie Zhang
The State Key Lab for Biocontrol / Institute of Entomology
Zhongshan University, Guangzhou 510275, CHINA
Tel: +86 20-84112297 Fax. +86 20-84037472
Email: LS11@ZSU.EDU.CN

**Technical Training Course ANIC, Canberra**
Staff of the Australian National Insect Collection provide a training course for entomological technicians working with research collections of insects and related organisms for taxonomic study and identification. This course is designed to teach participants how to collect, prepare and curate entomological material to a stage ready for identification. The course comprises a series of demonstrations on these aspects as they relate to the major orders of insects and related arthropods. Specimen identification is not covered in the course. All demonstrations are conducted by ANIC staff expert in the area of concern. The next course will be held 23 - 27 September 2002, at the CSIRO Entomology Black Mountain Laboratories, Clunies Ross St, Acton, ACT 2601.
For more information contact Graham Crompton, ANIC Manager
Phone: (02) 6246 4036
Fax: (02) 6246 4264
Email: graham.crompton@ento.csiro.au
http://www.ento.csiro.au/products/products.html#training

**A.E.S. PHIL CARNE PRIZE**
The Executive takes pleasure in announcing The Australian Entomological Society's Phil Carne Prize. This prize honours contributions made by Dr Phil Carne to the science of entomology and to The Australian Entomological Society, and is intended to foster high-quality entomological research among young scientists. The prize is open to any undergraduate or postgraduate who has submitted a paper to the **Australian Journal of Entomology** and had it accepted for publication within the last year. Entrants may be enrolled full or part-time, and are not required to be members of The Australian Entomological Society. Entries will be reviewed by the normal Journal referring process. The Chief Editor will advise the Executive of the eligible papers and these will be presented to a selection committee appointed and convened by the Vice-President of the Society.
The winner will be invited to present the winning paper at the Society's Annual General Meeting and Scientific Conference. The prize will be $300 plus free conference registration, accommodation, return airfare to the Annual Conference and presentation of a scroll.
Manuscripts and other editorial correspondence should be addressed to Dr Peter Allsopp, Chief Editor, Bureau of Sugar Experiment Stations, Private Bag 4, Bundaberg DC 4670, Queensland.

## MACKERRAS MEDAL

Do you know an entomologist who deserves special praise?
The **Mackerras Medal** is the Australian Entomological Society's award for excellence and can be awarded every two years to a financial member of the Society who is: under 50 years of age, pursuing excellent research, and has outstanding personal qualities.
Any financial member, including students, may make a nomination to the Secretary. The nominations should be received at least 3 months before the AGM and must include: Candidate's name and date of birth,
academic distinctions, appointments and society memberships, list of publications, and 500 words explaining why the award should be made.

**THE AUSTRALIAN ENTOMOLOGICAL SOCIETY INC.**
**NOMINATION FOR MEMBERSHIP**

**Please return to:** Ms Nancy Endersby, AES Secretary, c/o Institute for Horticultural Development, Private Bag 15, Ferntree Gully Delivery Centre VIC 3156 AUSTRALIA

We, the undersigned

**Proposer** .....
(print name) (signature)

**Seconder** .....
(print name) (signature)
being financial members of the Society, propose the following for membership of the Australian Entomological Society Inc.

Title.....Initials.....Given name.....Family name.....

of (Address) .....

.....Post Code.....

Tel. .....Fax .....

E-mail ..... Degrees, etc. .....

Interests, experience and publications in entomology for publication in the News Bulletin *Myrmecia* (please attach brief resumé) .....

I accept nomination and undertake, if elected, to abide by the rules of the Society and to pay annual subscriptions by the date prescribed.

**Signature** ..... **Date** .....

For **2002**: Annual subscription $93.50; full-time student or retired members $46.75 (incl. GST)
New members receive a first year rebate of $5.00 (pay $88.00) and students $2.50 (pay $44.00).
**Students please attach proof of full-time student status**
**Payment in Australian dollars is required with nomination** and may be made by MONEY ORDER, CHEQUE (made payable to Australian Entomological Society Inc.) or CREDIT CARD

Bankcard Visa Mastercard

Cardholder Name _____
Number _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ Expiry date _ _/_ _

Signature _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ I require a receipt YES/ NO